AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A method for introduction or extraction of bioparticles into or from biological membrane-enveloped structures, comprising:

applying a magnetic alternating field to a sample comprising biological membrane-enveloped structures and magnetically susceptible particles, whereby an increase of the thermal and optionally kinetic energy of said magnetically susceptible particles causes the formation of pores in said biological membrane-enveloped structures,

wherein said pores allow the introduction or extraction of bioparticles into or from said biological membrane-enveloped structures, and

wherein said biological membrane-enveloped structures are selected from the group consisting of cells, bacteria, virus particles, and organelles at a subcellular level.

2. (Original) A method according to claim 1, wherein said magnetic field has an alternating field direction of a frequency in the range 1-5 MHz.

3. (Previously Presented) A method according to claim 1, wherein said magnetic field has a field strength of 1 mT.

4. (Previously Presented) A method according to claim 1, wherein said magnetic field is non-homogeneous and has an alternating gradient field direction, the direction of said alternating gradient field being generated by two coils, and said sample is inserted between the coils.

5. (Original) A method according to claim 4, wherein said coils are supplied with alternating currents of different frequencies.

6. (Original) A method according to claim 4, wherein said coils are supplied with either the positive or the negative part of the supplied alternating current.

7. (Previously Presented) A method according to claim 1, wherein said bioparticles are selected from the group consisting of DNA molecules, RNA molecules, proteins, other biopolymers, peptides, chemical preparations, organic compounds, inorganic compounds, synthetic polymers and combinations thereof.

8. (Canceled).

9. (Previously Presented) A method according to claim 1, for use for specific lysis of cells.

10. (Previously Presented) A method according to claim 1, for use for modifying the genetic code of a host cell and/or metabolism.

11. (Canceled)

12. (Original) A method according to claim 2, wherein said magnetic field has a field strength of 1 mT.

13. (Original) A method according to claim 2, wherein said magnetic field is non-homogeneous and has an alternating gradient field direction, the direction of said alternating gradient field being generated by two coils, and said sample is inserted between the coils.

14. (Original) A method according to claim 3, wherein said magnetic field is non-homogeneous and has an alternating gradient field direction, the direction of said alternating gradient field being generated by two coils, and said sample is inserted between the coils.

15. (Original) A method according to claim 12, wherein said magnetic field is non-homogeneous and has an alternating gradient field direction, the direction of said alternating gradient field being generated by two coils, and said sample is inserted between the coils.

16. (Previously Presented) A method according to claim 2, wherein said bioparticles are selected from the group consisting of DNA molecules, RNA

molecules, proteins, other biopolymers, peptides, chemical preparations, organic compounds, inorganic compounds, synthetic polymers and combinations thereof.

17. (Canceled).

18. (Original) A method according to claim 2, for use for specific lysis of cells.

19. (Original) A method according to claim 2, for use for modifying the genetic code of a host cell and/or metabolism.

20. (Canceled)